

## Problem Statement-2

```
project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/maven-v4_0_0.xsd">
<modelVersion>4.0.0</modelVersion>
<groupId>SpringSetup</groupId>
<artifactId>SpringSetup</artifactId>
<packaging>war</packaging>
<version>0.0.1-SNAPSHOT</version>
<name>SpringSetup Maven Webapp</name>
<url>http://maven.apache.org</url>
<properties>
<org.springframework.version>5.1.6.RELEASE</org.springframework.version>
</properties>
<dependencies>
<dependency>
<groupId>junit</groupId>
<artifactId>junit</artifactId>
<version>3.8.1</version>
<scope>test</scope>
</dependency>
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-core</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-expression</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-beans</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-context</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-context-support</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
```

```
<groupId>org.springframework</groupId>
<artifactId>spring-jdbc</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-orm</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-web</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-webmvc</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>javassist</groupId>
<artifactId>javassist</artifactId>
<version>3.12.1.GA</version>
</dependency>
<dependency>
<groupId>taglibs</groupId>
<artifactId>standard</artifactId>
<version>1.1.2</version>
<scope>runtime</scope>
</dependency>
<dependency>
<groupId>commons-dbcp</groupId>
<artifactId>commons-dbcp</artifactId>
<version>1.4</version>
</dependency>
<dependency>
<groupId>javax.servlet</groupId>
<artifactId>jstl</artifactId>
<version>1.2</version>
</dependency>
<dependency>
<groupId>javax.servlet</groupId>
<artifactId>jstl</artifactId>
<version>1.2</version>
</dependency>
<dependency>
<groupId>javax.persistence</groupId>
<artifactId>persistence-api</artifactId>
<version>1.0.2</version>
```

```

<scope>provided</scope>
</dependency>
</dependencies>
<build>
<finalName>SpringSetup</finalName>
</build>
</project>

```

```

package com.first.firstspringboot;
import org.springframework.context.ApplicationListener;
import org.springframework.context.event.ContextStartedEvent;
public class StartEventHandler implements
ApplicationListener<ContextStartedEvent>{
public void onApplicationEvent(ContextStartedEvent event) {
System.out.println("ContextStartedEvent Received");
}
}

```

```
package com.first.firstspringboot;
```

```

import org.springframework.context.ApplicationListener;
import org.springframework.context.event.ContextStoppedEvent;

```

```

public class StopEventHandler implements ApplicationListener<ContextStoppedEvent>{

    public void onApplicationEvent(ContextStoppedEvent event) {
        System.out.println("ContextStoppedEvent Received");
    }
}

```

```

package com.first.firstspringboot;
import org.springframework.context.ApplicationEvent;
public class CustomEvent extends ApplicationEvent{
    private static final long serialVersionUID = 1L;
    public CustomEvent(Object source) {
super(source);
}
public String toString(){
return "This is a custom event";
}
}

```

```
package com.first.firstspringboot;
```

```

import org.springframework.context.ApplicationEventPublisher;
import org.springframework.context.ApplicationEventPublisherAware;

```

```

public class CustomEventPublisher implements ApplicationEventPublisherAware {
    private ApplicationEventPublisher publisher;

    public void setApplicationEventPublisher (ApplicationEventPublisher publisher) {
        this.publisher = publisher;
    }
    public void publish() {
        CustomEvent ce = new CustomEvent(this);
        publisher.publishEvent(ce);
    }
}

package com.first.firstspringboot;
import org.springframework.context.ApplicationListener;
public class CustomEventListener implements ApplicationListener<CustomEvent> {
    public void onApplicationEvent(CustomEvent event) {
        System.out.println(event.toString());
    }
}
package com.first.firstspringboot;

```

```

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.validation.BindingResult;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RequestParam;

import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;

```

```

@Controller
public class MainController {

```

```

    @RequestMapping(value = "/customevent", method = RequestMethod.GET)
    public String customEvent(ModelMap map)
    {

```

```
        String confFile = "main-servlet.xml";
        @SuppressWarnings("resource")
        ApplicationContext context = new
ClassPathXmlApplicationContext(confFile);
        CustomEventPublisher cvp =
            (CustomEventPublisher) context.getBean("customEventPublisher");

        cvp.publish();
        cvp.publish();
        return "customEvent";
    }

}
```